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FINANCIAL-RELATED FACTORS IN ADOPTION OF COMPUTERIZED ACCOUNTING SYSTEM FOR IMPROVED PERFORMANCE OF SMALL AND MEDIUM SCALE ENTERPRISES (SMEs) IN ANAMBRA STATE

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Abstract

This study assessed the financial-related factors that influence the adoption of computerized accounting system (CAS) for improved performance of small and medium scale enterprises (SMEs) in Anambra State. Two research questions and two null hypotheses guided the study. The study adopted survey research design, and 5,396 (3,137 managers and 2,259 accounting officers) of SMEs in Anambra State were used as the population of the study. The sample was 361 managers and accounting officers of SMEs. Structured and validated questionnaire containing 10 items on a five-point Likert scale was used for data collection. The reliability of the instrument was established using Cronbach Alpha formula which yielded apha values of .88 and .78. Mean and t-test were used to analyze the data. Findings of the study showed that managers and accounting officers agreed that fund accessibility and fund management factors influenced the adoption of CAS for improved performance. It was also found that the mean ratings of managers and accounting officers do not differ regarding influence of fund accessibility and fund management factors on the adoption of CAS for improved performance of SMEs. Based on the findings of the study, the researchers conclude that fund accessibility and fund management factors influence the adoption of CAS for improved performance of SMEs. It was recommended among others that; government and financial institutions in Nigeria should ensure that loans and credit facilities provided to SMEs are easily accessible.

Keywords. Financial Factors, CAS, SMEs, Performance.

Introduction

No nation can survive without Small and Medium Enterprises (SMSs). This is why the Nigerian government encouragement the establishment and growth of SMEs in the country. SMEs are defined as business sectors involved in production, trading, and services with not more than 200 employees for medium-sized businesses, and not more than 50 employees for small-size businesses (Chuthamas, Aminue, Thiyada and Dayang, 2016). An SME is defined based on the value of assets or the number of full-time employees. In line with this, Ohachosim, Onwuchekwa and Ifeanyi (2012) defined SMEs as those enterprises with a total capital involvement not less than ₦1.5m, but not exceeding ₦200m with staff strength of not less than 10 and not more than 300 employees. SMEs are typically owned and run by people with the titles of business owners, entrepreneurs, or operators. In Nigeria, SMEs play tremendous roles in employment generation, provision of goods and services, improving the standard of living, and contributing to the gross domestic products (GDP) of the country (Paul, 2016). As such, proper accounting systems should be maintained in SMEs for effective operation.

An accounting system is the understanding of organizational setting, the flow of authority and responsibilities at different levels of management and adherence to standard accounting practices

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to ensure the "going concern principle" and the profitability of the enterprise (Nkwor-Azariah and Nkwor, 2015). SMEs in Nigeria as noted by Obamuyi and Ohachosim (2018) rely heavily on the Traditional Accounting Systems (TASs) where they only accept cash discounts when it is available. TASs do not easily provide information on inventory turnover, reorder points, ordering cost, or carrying costs. They rely on calculators and book ledgers, and leaves room for errors to be inserted into the information. The risk of damage to the records by water, fire and other risks according to Amanamah, Morrison and Asiedu (2016) constrain effective performance of SMEs. As a result, Computerized Accounting Systems (CASs) were developed and introduced into SMEs to improve performance.

The Computerized Accounting Systems (CAS) is a method or scheme by which financial information on business transactions is recorded, organized, summarized, analyzed, interpreted, and communicated to stakeholders through the use of computers and computer-based systems such as accounting packages (Marivic, 2013). It is a mechanized process of facilitating financial information inflows as well as the automation of accounting tasks such as database recording and report generation. CAS has revolutionized accounting practice, and significantly improved the performance of SMEs in developing countries by instilling controls in SMEs (Negalign, 2020). CAS creates access to debt financing as well as aids SMEs to create financial plans (Terungwa, 2012).

In Nigeria and Anambra State in particular, the adoption of CAS is at a transitional stage (Nkwor-Azarich and Nkwor, 2015). Most of the accounting systems in SMEs in Nigeria are not fully computerized, and at the same time, they are not purely traditional. Personal observation of the researcher indicated that some SMEs in Anambra State have computers for processing accounting tasks and at the same time rely much on hard copies of accounting records. This indicates that there could be factors influencing the adoption of CAS among SMEs in Anambra State including financial-related factors such as fund accessibility, fund management, high-quality accounting information, and investment in current and fixed assets, among others (Ohachosim, Onwuchekwa and Ifeanyi, 2012; Yusuf (2012).

Fund accessibility refers to the convenience with which SMEs obtain financial services including credits, deposits, payment, insurance, and other risk management services (Demirgüç-Kunt, Beck and Honohan, 2013). Fund accessibility for SMEs is vital for adequate funding through short and long-term loans. SMEs can survive and grow quickly through rapid response adjustments in good and bad economic times if they have access to funds (Isamail, 2014). However, the paucity of funds represents a critical challenge for SMEs and could prevent them from implementing CAS in their firm. SMEs in Nigeria inclusive lack access to finance for the initial set up of production line, expansion, and working capital. This is partly traceable to the poor saving habit in Nigeria due to low per capita income where the majorities of the population live below the poverty line and spend most of their income on basic food items (IMF, 2019). The IMF reported that 54 percent of the Nigerian population live on less than 1 dollar per day. The high poverty level makes savings difficult and translates to the non-availability of investment funds to prospective investors including SMEs.

In like manner, fund management is very crucial. Fund management involves the activity or job of managing an amount of money or cash inflow into a business. Fund management involves issues like budgeting allocation; fund disbursement; financial auditing; financial record keeping as well as fund utilization. Each of these sub-factors has a very significant role to play in the adoption of the computerized accounting system SMEs. According to Gholami (2018), many SMEs in Nigeria failed because owners overdrew more money than the profit they made. Anyanwu (2013) noted that

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prudent fund management will help SMEs to turn the economy around for good quality accounting information.

In Nigeria, SMEs in Nigeria and Anambra State are underperforming. This, according to Yusoff (2016), is due to the slow/non-adoption of CAS in their day-to-day operations. In view of this, there is urgent need to assess influencing factors to adoption of CAS by SMEs. Assessment is the systematic collection of information from individuals to make informed judgments about how to improve quality of judgment (Ikechukwu, 2021). It is the methodical process of collecting and examining data in order to generate judgments regarding financial-related factors that influence the adoption of CAS for enhanced SMEs' performance. Moreover, managers' and accountants' perspectives on the financial-related factors influencing SMEs' adoption of CAS may differ. In contrast to managers, who might not have the requisite CAS knowledge and skills, the accountants who are employed by SMEs to carry out accounting tasks may possess the electronic accounting skills, as a result, managers and accounting officers may feel that majority of these factors do not influence the adoption of CAS by SMEs. Additionally, accountants may have been taught during their school course programmes on how to employ various digital accounting technologies, as well as attend regular in-service digital accounting skills trainings to keep their electronic accounting abilities up to date. This may not be the case for SMEs' managers whose training programmes may concentrate explicitly on the managerial and administrative skills required for effective supervision. Therefore, this study assessed financial-related factors influencing the adoption of CAS for improved performance of SMEs in Anambra State.

Statement of the Problem

All over the world, SMEs are regarded as catalysts for economic growth and development. SMEs play tremendous roles in employment generation, provide goods and services, improve the standard of living, and enormously contribute to the gross domestic products (GDP). Given these roles of SMEs, there is need to ensure their survival by utilizing a Computerized Accounting System (CAS). Although, CAS is germane to the growth and development of business in developed countries, however, SMEs in Nigeria and Anambra State, in particular, seems to be slow in adopting CAS as most of them depend heavily on the Traditional Accounting Systems (TASs).

Several factors could be implicated for low adoption of CAS by SMEs, including; inadequate/lack of digital accounting skills of managers and accountants, poor technical knowhow, unavailability of digital accounting technologies, and reluctance of SMEs in embracing digitalization in their operations. However, financial-related factors could also be influencing factors on the adoption of CAS by SMEs in Nigeria, especially Anambra State. The assumption is that as a result of these factors, SMEs in Anambra State are not performing as expected. However, this assumption has not been empirical ascertained due to paucity of studies in this topic in Anambra State. This study, therefore, specifically ventured to assess the (1) fund accessibility factors that influence the adoption of CAS for improved performance of SMEs in Anambra State, and (2) fund management factors that influence the adoption of CAS for improved performance of SMEs in Anambra State.

Research Questions

The following research questions guided this study.

1. What are the fund accessibility factors that influence the adoption of computerized accounting system for improved performance of SMEs in Anambra State?
2. What are the fund management factors that influence the adoption of computerized accounting system for improved performance of SMEs in Anambra State?

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Research Hypotheses

The following corresponding hypotheses were also tested at .05 level of significant

1. There is no significant difference in the mean ratings of managers and accounting officers on fund accessibility factors that influence the adoption of computerized accounting system for improved performance of SMEs in Anambra State.
2. Managers and Accounting officers do not differ significantly in the mean ratings on fund management factors that influence the adoption of computerized accounting system for improved performance of SMEs in Anambra State.

Methods

This study adopted the descriptive survey research design. It was carried out in Anambra State in South-east Nigeria. The population of the study comprised 5,396 (3,137 managers and 2,259 accounting officers) of SMEs registered with Ministry of Commerce and Industry Anambra State as at June 28th, 2022. The sample size of 361 (216 managers and 145 accounting officers) of SMEs was drawn using Krejcie and Morgan (1970) table for determining sample size. A-10 item self-developed questionnaire titled "Financial and Technical Factors Influencing Adoption of Computerized Accounting System for Improved Performance (FTFI-ACASIP*)"*and face validated by three experts in the field of Business Education and Measurement and Evaluation Unit was used for data collection. The instrument was structured on a five-point Likert scale of Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD).

The reliability of the instrument was ascertained through pilot-testing and scores obtained were subjected to Cronbach Alpha formula which yielded reliability coefficient values of .88 and .78 for cluster B1 and B2 respectively with an overall reliability of .83. The researcher personally administered copies of the questionnaire to the respondents in their offices with the help of three research assistants adequately briefed on the modalities for administration and collection of copies of the questionnaire. Out of 361 copies of questionnaire administered, 352(98%) copies were correctly filled and returned which was used for data analysis. Data collected were analyzed using mean scores, standard deviation and t-test. A null hypothesis was accepted where the p-value is greater than the level of significance ($p > 0.05$) and rejected when the p-value is less than or equal to the level of significance ($p < 0.05$). All analysis was carried out with Statistical Package for Social Science (SPSS) version 23.

Results

The results are presented as follows.

Table 1.

Mean and Standard Deviation on Fund Accessibility Factors that Influence Adoption of CAS

S/N	Items on Fund Accessibility	$\bar{X}$	SD	Remarks
1	Financial subsidy by the Government	4.83	.91	Strongly Agree
2	High interest rate by financial institutions	3.83	.79	Agree
3	Provision of grants by clubs	2.97	.89	Undecided
4	Provision of grants by financial institutions	3.87	.82	Agree
5	High personal income	3.73	.69	Agree
6	Provision of loan by financial institutions	4.50	.64	Strongly Agree

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	Cluster Mean	**3.96**	**Agree**

Data in Table 1 reveal that out of 6 fund accessibility listed, respondents strongly agree that items 1 and 6 influence the adoption of CAS for improved SMEs performance with mean scores of 4.50 and 4.83. Items 2, 4 and 5 are rated agree with mean scores ranging from 3.73 to 3.83 while the respondents are undecided in item 3 with mean score of 2.97. The cluster mean score of 3.96 shows that on the whole, managers and accounting officers agree that fund accessibility are factors that influence the adoption of CAS for improved performance of SMEs in Anambra State. Standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

Table 2.

Mean and Standard Deviation on Fund Management Factors that Influence Adoption of CAS

S/N	Items on Fund Management	$\bar{X}$	SD	Remarks
7	Budgetary allocation by the company manager	4.52	.90	Strongly Agree
8	Fund disbursement and utilization by the company	3.90	.98	Agree
9	Financial record keeping in the company	4.43	.70	Agree
10	Financial auditing	3.87	.57	Agree
	Cluster Mean	**4.18**		**Agree**

Data in Table 2 show that out of 4 fund management listed, respondents rated item 7 strongly agree with mean score of 4.52 while the remaining three items (items 8. 9 and 10) are rated agree with mean scores ranging from 3.80 to 4.43. The cluster mean score of 4.18 indicates that on the whole, managers and accounting officers agree that fund management are factors that influence the adoption of CAS for improved performance of SMEs in Anambra State. Standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

Table 3

The t-test analysis of the mean ratings of managers and accounting officers on fund accessibility factors that influence the adoption of CAS

Position	N	$\bar{X}$	SD	Df	t-value	P-value	Decision
Accounting Officers	140	44.77	3.77				
				350	.80	. 43	Not Significant
Managers	212	44.52	3.96				

Table 3 shows that t - value of .80 at 350 degrees of freedom with p-value of .43 is greater than the significant value of .05 (P-value =.43 > .05). The null hypothesis is therefore accepted. This means that there is no significant difference in the mean ratings of managers and accounting officers on fund accessibility factors that influence the adoption of computerized accounting system for improved performance of SMEs in Anambra State.

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Table 4

The t-test analysis of in the mean ratings of managers and accounting officers on fund management factors that influence the adoption of CAS for improved performance of SMEs

Position	N	$\bar{X}$	SD	df	t-value	P-value	Decision
Accounting Officers	140	46.08	3.60				
				350	1.09	.29	Not Significant
Managers	212	45.06	3.49				

Table 4 shows that t - value of 1.09 at 350 degrees of freedom with p-value of .29 is greater than the significant value of .05 (P-value =.29 > .05). The null hypothesis is therefore accepted. This means that managers and accounting officers do not differ significantly in the mean ratings on fund management factors that influence the adoption of computerized accounting system for improved performance of SMEs in Anambra State.

Discussion of Findings

Findings of the study indicated that managers and accounting officers agree that fund accessibility are factors that influence the adoption of CAS for improved performance of SMEs in Anambra State. This finding underscores the importance of funds accessibility to the adoption of new innovations such as CAS by SMEs. Since adoption of CAS by SMEs requires enough investment in acquisition of ICT facilities such as computers, scanners, printers, accounting software, and generators/solar energies which are quite cost intensive. The funds accessibility potential of SMEs can make the procurement of digital accounting technologies possible which will in turn influence the adoption of CAS for improved performance. In most cases, SMEs may not have the required collateral to access financial credits from the financial institutions which could affect the procurement of accounting technologies as well as adoption of CAS. This could be the reason while some SMEs in Nigeria prefer adopting traditional accounting method in carrying out their accounting operations. In agreement, Mabula and Ping (2018) asserted that the adoption of accounting systems by SMEs is hampered by lack of access to financial credits to purchase digital accounting hardware and applications. Similarly, Ndekwa (2015) earlier reported that SMEs are slow to adopt CAS due to the fact that most digital accounting technologies available on the market are beyond the reach of many SMEs who lack access to financial services.

Findings of the study also disclosed that there was no significant difference in the mean ratings of managers and accounting officers on fund accessibility factors that influence the adoption of computerized accounting system for improved performance of SMEs in Anambra State. This implies that both managers ad accounting officer of SMEs in the area of the study recognize that fund accessibility plays an important role in the adoption of CAS to improve performance. In support, Amanamah et al. (2016) noted that managers and accountants viewed fund accessibility as one of the influencing factors to the adoption of CAS by SMEs in Nigeria.

Findings of the study revealed that managers and accounting officers agree that fund management are factors that influence the adoption of CAS for improved performance of SMEs in Anambra State. The findings specifically showed that managers and accounting officers strongly agree that budgetary allocation by the company manager influence their adoption of CAS while they agree that fund disbursement and utilization by the company, financial record keeping in the company, and financial auditing influence the adoption of CAS for improved performance of SMEs. The

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findings of the study showed that good funds management is imperative to the adoption of CAS. This is because, when the fund management in SMEs is inadequate, it will be difficult for the business to attract additional funds for increased working capital, diversification, and procurement of new accounting technologies needed to effectively transition to CAS to improve the performance of SMEs. In support of this view point, Ikem, Onwuchekwa and Titus (2021) reported that good funds management influenced the adoption of CAS for improved performance of SMEs. Rogers (2016) noted that th*e managers' ability* to manage funds influence the adoption of CAS in *SMEs. In the same vein,* Sapkota (2022) found that *fund management* is an important factor that influences the adoption of CAS by SMEs owners to improve financial performance.

Findings of the study also disclosed that managers and accounting officers did not differ significantly in the mean ratings on fund management factors that influence the adoption of computerized accounting system for improved performance of SMEs in Anambra State. In order words, both managers and accounting officers agree that fund management influence the adoption of CAS for improved performance of SMEs. It could be that both managers and accounting officers in SMEs covered are knowledgeable about fund management and are adopting different fund management styles. Thus, knowledge is important to the adoption of new innovations especially CAS in an organization. Munasinghe and Munasinghe (2015) in agreement revealed that there was no significance influence from demographic variables on adoption of CASs in SMEs.

Conclusion

The Computerized Accounting System (CAS) is a new innovation in accounting field that plays an important role in helping SMEs to provide timely information management, large data storage capacity, and enhanced customer satisfaction. Undoubtedly, the adoption of CAS is influenced by a number of inherent factors which the present study sought to ascertain. Based on the findings of this study, the researchers conclude that fund accessibility and fund management factors influence the adoption of CAS for improved performance of SMEs.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Governments and financial institutions should ensure that loans and credit facilities provided to SMEs in Nigeria can be easily accessed by theses organizations. This will enable the SMEs to procure accounting hardware and software needed to adopt CAS for improved performance of SMEs.
2. Managers of SMEs in Nigeria should ensure that funds accrued to the organization are judiciously managed. This will enable SMEs managers to effectively fund the cost of purchase and installation of accounting tools needed for the adoption of CAS in SMEs.

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